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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/582,066	03/15/2007	Christian Erker	P/746-5	1551	
	7590 03/02/201 FABER GERB & SOF		P/746-5 1551 EXAMINER MICALI, JOSEPH ART UNIT PAPER NUMBER 1793	IINER	
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NEW YORK, N	NY 100368403		EXAMINER MICALI, JOSEPH ART UNIT PAPER NUMBER 1793 MAIL DATE DELIVERY MODE	PAPER NUMBER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)	
	10/582,066	ERKER ET AL.	
Office Action Summary	Examiner	Art Unit	
	Joseph V. Micali	1793	
The MAILING DATE of this communication a Period for Reply	ppears on the cover sheet w	ith the correspondence address	s
• •	DIVIQUET TO EVDIDE 3 N	MONTH(S) OD THIDTY (20) DA	AVC
A SHORTENED STATUTORY PERIOD FOR REF WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period. - Failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the main earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUN 1.136(a). In no event, however, may a od will apply and will expire SIX (6) MO ute, cause the application to become A	CATION. reply be timely filed NTHS from the mailing date of this commun BANDONED (35 U.S.C. § 133).	
Status			
1) Responsive to communication(s) filed on 04	January 2010.		
2a) This action is FINAL . 2b) ☑ Th	nis action is non-final.		
3)☐ Since this application is in condition for allow	ance except for formal mat	ters, prosecution as to the mer	rits is
closed in accordance with the practice under	r <i>Ex parte Quayle</i> , 1935 C.I	D. 11, 453 O.G. 213.	
Disposition of Claims			
4)⊠ Claim(s) <u>1-28</u> is/are pending in the application	on.		
4a) Of the above claim(s) is/are withdo	rawn from consideration.		
5) Claim(s) is/are allowed.			
6)⊠ Claim(s) <u>1-28</u> is/are rejected.			
7) Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and	or election requirement.		
Application Papers			
9)☐ The specification is objected to by the Exami	ner.		
10)☐ The drawing(s) filed on is/are: a)☐ a	ccepted or b) dobjected to	by the Examiner.	
Applicant may not request that any objection to the			
Replacement drawing sheet(s) including the corre	,		` '
11)☐ The oath or declaration is objected to by the	Exammer. Note the attache	d Office Action of form PTO-18	02.
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign	gn priority under 35 U.S.C.	§ 119(a)-(d) or (f).	
a) ☐ All b) ☐ Some * c) ☐ None of:			
1. Certified copies of the priority docume		Application No.	
2. Certified copies of the priority docume3. Copies of the certified copies of the priority			۵
application from the International Bure	•	Treceived in this National Stag	O
* See the attached detailed Office action for a li		received.	
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Attachment(s)			
1) Notice of References Cited (PTO-892)		Summary (PTO-413)	
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08)		(s)/Mail Date Informal Patent Application	
Paper No(s)/Mail Date	6) 🔲 Other:	·	

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DETAILED ACTION

Status of Application

The argumentation filed on January 4th, 2010 has been entered. Claims 1-28 remain pending and presented for examination on the merits.

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - 1. Determining the scope and contents of the prior art.
 - 2. Ascertaining the differences between the prior art and the claims at issue.
 - 3. Resolving the level of ordinary skill in the pertinent art.
 - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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4. Claims 1-6, 8, 12, 15-16, and 24-26 are rejected under 35 U.S.C. 103(a) as obvious over US Patent No. 4,321,087 by Levine et al, as evidenced by *PVD Aluminum Pigments:* Superior Brilliance for Coatings & Graphic Arts by Seubert, in view of US Patent No. 5,624,076 by Miekka et al.

With respect to claims 1-2, Levine discloses a cosmetic composition (for example, see assignee Revlon, Inc.) comprising a liquid phase and a PVD aluminum pigment, where the pigment has a metallic aluminum content of nearly 100 % by weight based on the weight of the aluminum pigment, as the pigment consists essentially of aluminum only, and is present in the cosmetic composition at 1 or 4.3% by weight based on the total weight of the cosmetic composition (examples 9-10, column 3, lines 17-37).

Levine is silent with regards to the PVD aluminum pigments with diffractive structures having the claimed number of structural elements (approximately 5,000 to 20,000) per cm.

However, as the applicant alludes to in the specification, the PVD aluminum pigments of the instant invention can be made by the process of US Patent No. 5,624,076 by Miekka et al (See specification, pgs. 4-5). Miekka is drawn to a process for making embossed metallic leafing pigments (title), and specifically, discloses producing bright-metal particles in which an embossed pattern comprising a diffraction grating having from about 5,000 to 11,000 grooves (structural elements) per cm (abstract, column 2, lines 23-28, and claim 5).

At the time of invention it would have been obvious to a person of ordinary skill in the art to produce the composition of Levine including PVD aluminum pigments with diffractive structures having the claimed number of structural elements, in view of the teaching of Miekka.

The suggestion or motivation for doing so would have been to produce a pigment with

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impressive aesthetic and decorative visual effects, such as with holographic imaging (Miekka, column 2, line 52 - column 3, line 5).

With respect to claims 3, 5, and 6, Levine discloses the addition of a film-forming component, such as cellulose nitrate (**column 3, lines 42-47, and example 9**), while the claim of a nail varnish is an intended use limitation and does not impart any structural difference between the claimed invention and the prior art.

With respect to claim 4, Levine discloses the addition of waxes (**column 3**, **lines 42-48**), while the claim of a lip gloss composition is an intended use limitation and does not impart any structural difference between the claimed invention and the prior art.

With respect to claim 8, Levine discloses the liquid phase being of an organic solvent, such as methyl/ethyl cellosolve i.e. glycol ethers (examples 9-10).

With respect to claims 12 and 24, Levine discloses the aluminum pigment present in the cosmetic composition at 1% by weight based on the total weight of the cosmetic composition (example 10).

With respect to claims 15 and 25, examiner has shown that such diffractive structures are inherent in the PVD aluminum pigments of Levine, and Seubert proves that such diffractive structures are a reflection grating (Seubert, figures on pgs. 4-6 regarding the PVDA pigment).

With respect to claims 16 and 26, Levine discloses a pigment thickness of 350-450 angstroms, or 35-45 nm (column 2, lines 61-63).

5. Claims 7, 9-11, 13-14, 18, 21-22, and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 4,321,087 by Levine et al in view of US Patent No.

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5,624,076 by Miekka et al, as applied to claims 1-6, 8, 12, 15-16, and 24-26 above, and further in view of US Patent Pub. No. 2003/0175225 by Leacock et al.

With respect to claim 7, Levine discloses the addition of a film-forming component, such as cellulose nitrate. However, Levine is silent to the film-forming component comprising cellulose acetate butyrate.

Leacock is drawn to nail enamel compositions exhibiting color change (**title**). Specifically, Leacock discloses both nitrocellulose (cellulose nitrate) and cellulose acetate butyrate as pigment dispersants and film-forming binders (**paragraph 0004**).

At the time of invention it would have been obvious to a person of ordinary skill in the art to produce the modified composition of Levine including the use of cellulose acetate butyrate, in view of the teaching of Leacock. The suggestion or motivation for doing so would have been a simple substitution of one known element for another to obtain predictable results, as cellulose acetate butyrate has been taught to be a known alternative for cellulose nitrate (**Leacock**, **paragraph 0004**).

With respect to claims 9-10, Leacock discloses the composition including a plasticizer, specifically dibutyl phthalate, as well as a dispersing agent (paragraphs 0004-0006, 0012).

With respect to claim 11, Leacock discloses the composition including a bentonite, specifically stearalkonium bentonite (paragraph 0012).

With respect to claims 13-14, 18, and 21-22, Leacock discloses the composition including coloring agents, such as colored pigments (**paragraph 0013**).

With respect to claim 27, as Leacock is drawn to a nail enamel composition, and specifically discloses use on artificial fingernails as well as human fingernails (**paragraph 0002**).

With respect to claim 28, Leacock discloses the selection of organic solvent being one of butyl acetate, propyl acetate, ethyl acetate, ispropanol, butyl alcohol (**paragraph 0012**).

6. Claims 17, 19, 20, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 4,321,087 by Levine et al in view of US Patent No. 5,624,076 by Miekka et al, as applied to claims 1-6, 8, 12, 15-16, and 24-26 above, and further in view of US Patent No. 6,042,842 by Lemann et al.

With respect to claims 17 and 19, Levine discloses the addition of waxes, while the claim of a lip gloss composition is an intended use limitation and does not impart any structural difference between the claimed invention and the prior art. However, Levine does not recite oils or gels being used.

Lemann is drawn to cosmetic compositions comprising novel pigments (**title**) for use in products to be applied to the lips, eyes, skin, and nails, such as nail varnishes or waxes (**column 4, lines 20-26, 45-59**). Lemann discloses the addition of oils, such as castor oil and oleyl alcohols for example (**column 4, line 60 - column 5, line 27**).

At the time of invention it would have been obvious to a person of ordinary skill in the art to produce the modified composition of Levine including the use of an oil such as castor oil and oleyl alcohol, in view of the teaching of Lemann. The suggestion or motivation for doing so would have been to include a fatty substance, which can be liquid at room temperature, for control over the viscosity of the preferred final product (**Lemann, column 4, lines 20-39, 54-59**).

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With respect to claim 20, Lemann discloses specific waxes to be used, such as beeswax, carnauba or candelilla wax, microcrystalline waxes, ceresin or ozokerite (column 6, lines 24-27).

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With respect to claim 23, Lemann discloses the addition of fragrances (perfumes) and preservatives to the composition (**column 5, lines 30-37**).

Response to Arguments

7. Applicant's arguments filed on January 4th, 2010 have been fully considered but they are not persuasive.

Firstly, examiner has amended his rejections to create a 103 rejection of Levine in view of US Patent No. 5,624,076 by Miekka. Miekka was brought in to explicitly disclose the production of aluminum pigments with diffractive structures having the claimed number of structural elements (5,000 to 11,000) per cm. Thus, applicant's argumentation is not persuasive, as it does not take the Miekka reference into consideration. However, examiner will address argumentation on the prior art of record themselves, as each of the prior-used references still remain in the modified rejections.

With respect to applicant's argumentation, applicant first argues the Levine reference constitutes non-analogous art. Applicant cites two examples (examples 9 and 10) of the reference as supposed proof. This is unpersuasive, as the reference cannot be voided for teaching other embodiments if the full disclosure still reads upon the claimed invention. See MPEP 2141.02 [R-5] Section VI. Furthermore, in the Levine reference, column 7, lines 39-46, it is stated that the prior art invention can be used in several arts, such as printing, coating, lacquer, and paint products. Essentially, a cosmetic coating is still a coating or lacquer. Finally, such arguendo is moot anyway, as it is drawn to the intended use of the composition. The patentable invention is

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only the limitations of the composition, not the intended use of it in the cosmetic arts. The MPEP states, "A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim."

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Applicant's argumentation on the limitation of diffractive structures is not persuasive. This is because applicant has failed to show that the disclosure of Levine does not disclose diffractive structures. Applicant admits the PVD pigments of Levine are mirror-like. Does this not constitute a diffractive structure? Furthermore, examiner brought in the evidentiary document of Seubert to show PVDA pigments have diffractive structures. For some reason, applicant discusses, in length, conventional pigments obtained by ball milling, discussed in Seubert as well. Examiner agrees that such pigments are different from the PVD pigments.

Applicant's argumentation on the rejections involving Levine and Seubert are not persuasive, as the chief grounds of applicant's arguments have been addressed supra.

Furthermore, with regards to the additional rejections, such argumentation is not persuasive. Firstly, with regards to the rejections involving the Leacock reference, applicant fails to argue the examiner's purpose for combination and motivation/suggestion to combine. Thus, the examiner maintains such a rejection. Secondly, with regards to the rejections involving the Lemann reference, applicant makes no new grounds of argumentation.

Thus, on the whole, applicant's argumentation is deemed not persuasive.

Conclusion

8. Claims 1-28 are rejected.

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph V. Micali whose telephone number is (571) 270-5906.

The examiner can normally be reached on Monday through Friday, 7:30am to 5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry A. Lorengo can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joseph V Micali/ Examiner, Art Unit 1793 /J.A. LORENGO/ Supervisory Patent Examiner, Art Unit 1793